

ABSTRACT OF THE DISCLOSURE

A peak level of amplitude of transmission signals in a multi-carrier communication system or the like is to be effectively suppressed. A transmission data generating unit generates digital transmission data from original data by an OFDM system. A limiter of a peak suppressing unit limits a level of transmission data using thresholds. A subtractor subtracts output data of the limiter from the transmission data to generate differential data. A subtractor suppresses the peak level by subtracting the differential data from transmission data whose timing is coordinated by delay units. A transmitter unit converts the transmission data whose peak level is suppressed into analog transmission signals, further converts their frequency, amplifies their power, and transmits the frequency-converted and power-amplified signals to a radio line via an antenna.